UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450

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NOTICE OF ALLOWANCE AND FEE(S) DUE

86738 12/26/2012 MCCARTER & ENGLISH, LLP BOSTON 265 Franklin Street Boston MA 02110

EXAMINER		
DEVI, SARV.	AMANGALA J N	
ART UNIT	PAPER NUMBER	
	-1	

DATE MAILED: 12/26/2012

I	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
ľ	09/445,289	05/11/2000	GALINA V MUKAMOLOVA	118160-00301	9774

TITLE OF INVENTION: BACTERIAL PHEROMONES AND USES THEREFOR

APPLN, TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1770	S0	\$0	\$1770	03/26/2013

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown

B. If the status above is to be removed, check box 5b on Part B -Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450

Alexandria, Virginia 22313-1450 or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address and indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or by indicating a separate "FEE ADDRESS" for maintenance fee notification

86738

MCCARTER & ENGLISH, LLP BOSTON 265 Franklin Street Boston, MA 02110

ADDENT TYDE

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)	
(Signature)	
(Date)	

DATE DHE

APPLICATION NO FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO 09/445 289 05/11/2000 GALINA V MUKAMOLOVA 118160-00301 9774 TITLE OF INVENTION: BACTERIAL PHEROMONES AND USES THEREFOR

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nonprovisional	NO	\$1770	so	\$0	\$1770	03/26/2013
EXAM	INER	ART UNIT	CLASS-SUBCLASS			
DEVI, SARVAN	MANGALA J N	1645	435-073000			
1. Change of corresponde	ence address or indicatio	n of "Fee Address" (37	2. For printing on the p	atent front page, list		
CFR 1.363). ☐ Change of correspondence address (or Change of Correspondence			(1) the names of up to or agents OR, alternativ	3 registered patent attorr	neys 1	
Address form PTO/SB/122) attached. "Fee Address" indication (or "Fee Address" Indication form		(2) the name of a single	e firm (having as a memb	er a 2		
PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.			registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.		ne is 3	

Number is required.	issed, no name win be printed.
3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON	THE PATENT (print or type)
PLEASE NOTE: Unless an assignee is identified below, no assigne recordation as set forth in 37 CFR 3.11. Completion of this form is No.	e data will appear on the patent. If an assignee is identified below, the document has been filed for DT a substitute for filing an assignment.
(A) NAME OF ASSIGNEE	(B) RESIDENCE: (CITY and STATE OR COUNTRY)
Please check the appropriate assignee category or categories (will not be	printed on the patent): 🔲 Individual 🔟 Corporation or other private group entity 🔟 Government
	4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)
☐ Issue Fee	A check is enclosed.
☐ Publication Fee (No small entity discount permitted)	■ Payment by credit card. Form PTO-2038 is attached.
Advance Order - # of Copies	The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number(enclose an extra copy of this form).
5. Change in Entity Status (from status indicated above)	
a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.	□ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).
NOTE: The Issue Fee and Publication Fee (if required) will not be accept interest as shown by the records of the United States Patent and Trademan	ed from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in k Office.

Authorized Signature Date Typed or printed name Registration No. This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time your require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer. U.S. Patert and Trademark Officer. U.S. Peterstreat of Commerce, P.O. Box 1450, Alexandria, Virginia 2231-450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 2231-450.

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P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/445,289 05/11/2000 GALINA V MUKAMOLOVA			118160-00301 9774	
86738 75	90 12/26/2012	EXAMINER		
MCCARTER & ENGLISH, LLP BOSTON			DEVI, SARVA	MANGALA J N
265 Franklin Stree				
Boston MA 02110			ART UNIT	PAPER NUMBER

1645 DATE MAILED: 12/26/2012

Determination of Patent Term Extension under 35 U.S.C. 154 (b)

(application filed after June 7, 1995 but prior to May 29, 2000)

The Patent Term Extension is 0 day(s). Any patent to issue from the above-identified application will include an indication of the 0 day extension on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Extension is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

- The information on this form will be treated confidentially to the extent allowed under the Freedom
 of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of
 records may be disclosed to the Department of Justice to determine whether disclosure of these
 records is required by the Freedom of Information Act.
- A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement necotiations.
- 3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
- 4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
- 5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
- A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
- 7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 4 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
- 8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
- A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Notice of Allowability

Application No.	Applicant(s)
09/445,289	MUKAMOLOVA ET AL.
Examiner	Art Unit
e DEVI BLD	1645

Notice of Allowability	Examiner	Art Unit		
	S. DEVI, Ph.D	1645		
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-89) or other appropriate communication will be made in due course, THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CPR 1.313 and MPEP 1308.				
1. A This communication is responsive to Applicants' amendment	t filed 10/19/12.			
 An election was made by the applicant in response to a rest requirement and election have been incorporated into this ac 		ne interview on	; the restriction	
 The allowed claim(s) is/are <u>claims 126, 127, 131, 144, 149, 6.7, 8-10, and 11-20 respectively.</u> As a result of the allowed <u>Highway</u> program at a participating intellectual property offine <u>http://www.usplo.gov/patents/init_events/pph/index.isp</u> or se 	claim(s), you may be eligible to ben be for the corresponding application.	efit from the Patent P For more information	rosecution	
 Acknowledgment is made of a claim for foreign priority under a) ☐ All b) ☐ Some* c) ☐ None of the: 	r 35 U.S.C. § 119(a)-(d) or (f).			
 Certified copies of the priority documents have 	been received.			
Certified copies of the priority documents have	been received in Application No			
Copies of the certified copies of the priority do	cuments have been received in this r	national stage applica	tion from the	
International Bureau (PCT Rule 17.2(a)).				
* Certified copies not received:				
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		complying with the rec	quirements	
5. CORRECTED DRAWINGS (as "replacement sheets") must	be submitted.			
including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No://Mail Date				
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t			back) of	
 DEPOSIT OF and/or INFORMATION about the deposit of B attached Examiner's comment regarding REQUIREMENT FC 				
Attachment(s) 1. ☐ Notice of References Cited (PTO-892)	5. ⊠ Examiner's Amendn	aont/Commont		
Information Disclosure Statements (PTO/SB/08),	6. ☐ Examiner's Stateme		wance	
Paper No./Mail Date	_			
□ Examiner's Comment Regarding Requirement for Deposit of Biological Material □ Interview Summary (PTO-413), Paper No./Mail Date 201212.	7. ☐ Other <u>Reconsidered</u>	I page 2 of IDS of 04/2	<u>24/00</u> .	
rapor recoveral bate <u>201212</u> .				

ATTACHMENT TO NOTICE OF ALLOWABILITY Continued Examination under 37 C.F.R 1.114

1) A request for continued examination under 37 C.F.R 1.114, including the fee set forth in 37 C.F.R 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 C.F.R 1.114, and the fee set forth in 37 C.F.R 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 C.F.R 1.114. Applicants' submission filed on 07/02/12 has been entered.

Applicants' Amendments

2) Acknowledgment is made of Applicants' amendments filed 10/09/12 and 07/02/12 in response to the final Office Action mailed 01/18/12.

Examiner's Amendment

3) An Examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to Applicants, an amendment may be filed as provided by 37 C.F.R 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee. The authorization to prepare this Examiner's amendment was provided by attorney Maria Laccotripe Zacharakis via a telephonic communication on 10 December 2012.

This application has been amended as indicated below.

Claims 126, 144, 160, 161, 163 and 164 have been amended as indicated below:

In the last two lines of claims 126, 144, 160, 161, 163 and 164, the limitation 'Micrococcus ssp. and Mycobacterium ssp.' is replaced with the limitation -- *Micrococcus* spp. and *Mycobacterium* spp.--.

This amendment is supported by the fourth full paragraph of page 21 of the original specification.

Status of Claims

4) Claims 126, 144, 159-161, 163 and 164 have been amended via the amendment filed 07/02/12.

Claims 128 and 162 have been canceled via the amendment filed 07/02/12.

Claims 141, 160, 161, 163 and 164 have been amended via this Examiner's amendment

The examination has been extended to the previously non-elected polypeptide species of SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 6, SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 36 and SEQ ID NO: 43.

Claims 126, 127, 131, 144, 149, 150, 157, 159-161 and 163-172 are pending and are under examination.

Objection(s) Moot

5) The objection to the specification made in paragraph 7 of the Office Action mailed 01/05/10 is moot in light of Applicants' cancellation of claims 128 and 162.

Objection(s) Withdrawn

6) The objection to claims 160, 161 and 163 made in paragraph 24 of the Office Action mailed 01/05/10 is withdrawn in light of Applicants' amendments to the claims.

Rejection(s) Moot

7) The rejection of claims 128 and 162 made in paragraph 19 of the Office Action mailed 01/05/10 under 35 U.S.C. § 112, first paragraph, as containing new matter, is moot in light of Applicants' cancellation of the claims.

8) The rejection of claims 128 and 162 made in paragraph 21 of the Office Action mailed 01/05/10 under 35 U.S.C. § 112, second paragraph, as being indefinite, is moot in light of Applicants' cancellation of the claims.

Rejection(s) Withdrawn

- 9) The rejection of claims 126, 127, 131, 144, 149, 150, 157, 159-161, 163, 164 and 167 made in paragraph 21 of the Office Action mailed 01/05/10 under 35 U.S.C. § 112, second paragraph, as being indefinite, is withdrawn in light of Applicants' amendment to the claims and/or the base claim.
- **10)** The rejection of claims 126, 127, 131 and 144 made in paragraph 23 of the Office Action mailed 01/05/10 under 35 U.S.C. § 102(b) as being anticipated by of Mukamolova *et al.* (*Antonie van Leeuwenhoek* 67: 289-295, 1995, of record) (Mukamolova *et al.*, 1995) as evidenced by Mukamolova *et al.* (*PNAS* 95: 8916-8921, July 1998, of record) (Mukamolova *et al.*, 1998), is withdrawn in light of Applicants' amendment to the claims and/or the base claims.

Conclusion

11) Claims 126, 127, 131, 144, 149, 150, 157, 159-161 and 163-172, now renumbered as claims 1, 2, 3, 4, 5, 6, 7, 8-10, and 11-20 respectively, are allowed.

Correspondence

- 12) Papers related to this application may be submitted to Group 1600, AU 1645 by facsimile transmission. Papers should be transmitted via the PTO Central Fax number, (571) 273-8300, which receives transmissions 24 hours a day and 7 days a week.
- 13) Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information

Application/Control No: 09/445,289 Art Unit: 1645 December, 2012

for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.Mov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (in USA or CANADA) or 571-272-1000.

15) Any inquiry concerning this communication or earlier communications from the Examiner should be directed to S. Devi, Ph.D., whose telephone number is (571) 272-0854. A message may be left on the Examiner's voice mail system. The Examiner can normally be reached on Monday to Friday from 7.15 a.m. to 4.15 p.m. except one day each bi-week, which would be disclosed on the Examiner's voice mail system.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Acting Supervisor Ja'Na Hines, can be reached on (571) 272-0859.

/S. Devi/ Primary Examiner AU 1645

December, 2012